

CLAIMS

1. A disc cartridge comprising:

a cartridge body including a disc storage portion and a bottom window, wherein the disc storage portion has a disc window and a bottom and stores a disc, having first and second sides, therein so that the disc is rotatable there and that the first side is exposed through the disc window; and the bottom window is opened through the bottom of the disc storage portion so as to get the disc chucked externally and to allow a head, which reads and/or writes information, to access the second side of the disc;

at least one shutter, provided on the bottom of the disc storage portion, for opening or shutting the bottom window;

a rotational member, which is supported by the cartridge body so as to be rotatable therein and is interlocked with the shutter so as to open and close the shutter by rotating itself;

a disc holding portion for interlocking with the shutter that is opening or closing so as to hold the disc onto either the shutter or the cartridge body when the shutter shuts the

bottom window and to release the disc when the shutter opens the bottom window; and

a stopper member, which is supported by the cartridge body so as to be movable from a position protruding into the disc window to a position not protruding into the disc window, or vice versa,

wherein the disc holding portion interlocks with the stopper member, and releases the disc when the stopper member has moved to the position not protruding into the disc window.

2. The disc cartridge of claim 1, wherein the stopper member and the rotational member interlock together, thereby interlocking the disc holding portion and the stopper member with each other.

3. The disc cartridge of claim 2, further comprising a coupling member for interlocking the stopper member and the rotational member together.

4. The disc cartridge of claim 3, wherein the coupling

member includes first and second engaging portions to engage with the stopper member and the rotational member, respectively, the second engaging portion contacting and engaging with the rotational member while the stopper member is moving.

5. The disc cartridge of claim 4, wherein the first engaging portion of the coupling member is supported by the stopper member so as to be rotatable.

6. The disc cartridge of claim 4, wherein the coupling member is positioned such that the second engaging portion of the coupling member does not contact with the rotational member while the stopper member is protruding into the disc window.

7. The disc cartridge of claim 6, wherein the second engaging portion of the coupling member has a pin portion, and

wherein the cartridge body has a groove portion, which fits with the pin portion to define a direction in which the

second engaging portion moves.

8. The disc cartridge of claim 1, wherein the cartridge body has a removal history hole, which is cut through the cartridge body, and a columnar cap member, which covers the removal history hole at least partially and which is attached to, but readily removable from, the cartridge body, and

wherein the stopper member has a hole to which the cap member is inserted.

9. The disc cartridge of claim 1, further comprising a locking member for locking the rotational member onto the cartridge body while the shutter closes the bottom window.

10. The disc cartridge of claim 9, wherein the stopper member and the locking member interlock together so as to make the locking member unlock the rotational member by moving the stopper member.

11. The disc cartridge of claim 10, wherein the stopper

member and the rotational member interlock together, thereby interlocking the disc holding portion and the stopper member with each other.

12. The disc cartridge of claim 11, further comprising a coupling member for interlocking the stopper member and the rotational member together.

13. The disc cartridge of claim 12, wherein the coupling member includes first and second engaging portions to engage with the stopper member and the rotational member, respectively, the second engaging portion contacting and engaging with the rotational member while the stopper member is moving.

14. The disc cartridge of claim 13, wherein the first engaging portion of the coupling member is supported by the stopper member so as to be rotatable.

15. The disc cartridge of claim 14, wherein the coupling

member is positioned such that the second engaging portion of the coupling member does not contact with the rotational member while the stopper member is protruding into the disc window.

16. The disc cartridge of claim 15, wherein the second engaging portion of the coupling member has a pin portion, and wherein the cartridge body has a groove portion, which fits with the pin portion to define a direction in which the second engaging portion moves.

17. The disc cartridge of one of claims 1 to 16, wherein while the stopper member is not protruding into the disc window, the disc holding portion does not protrude into the disc window, either.

18. The disc cartridge of one of claims 1 to 16, wherein the stopper member either turns or slides with respect to the cartridge body, thereby taking the position protruding into the disc window or the position not protruding into the disc

window.

19. The disc cartridge of claim 1, comprising two shutters including the at least one shutter, wherein the disc holding portion is provided for each of the two shutters.

20. The disc cartridge of claim 19, wherein the disc holding portions hold the disc by pressing at least outer peripheral portions of the second side of the disc against the bottom of the disc storage portion.

21. The disc cartridge of claim 1, wherein the stopper member is provided so as to be attachable and removable to/from the cartridge body.

22. The disc cartridge of claim 9, wherein the locking member is provided so as to be attachable and removable to/from the cartridge body.